ABSTRACT OF THE DISCLOSURE

METHOD AND SYSTEM FOR AUTONOMIC PERFORMANCE IMPROVEMENTS IN AN APPLICATION VIA MEMORY RELOCATION

A method, an apparatus, and a computer program product in a data processing system are presented for using hardware assistance for gathering performance information that significantly reduces the overhead in gathering such information. Performance indicators are associated with instructions or memory locations, and processing of the performance indicators enables counting of events associated with execution of those instructions or events associated with accesses to those memory locations. The performance information that has been dynamically gathered from the assisting hardware is available to the software application during runtime in order to autonomically affect the behavior of the software application, particularly to enhance its performance. For example, the counted events may be used to autonomically improve the performance of the execution of an application by relocating code segments and data areas.